

CLAIMS

What is claimed is:

1. Apparatus for visually conveying information in a manufacturing process comprising:

a container for transporting work in progress used in the manufacturing process;

an electronic data card that follows the container through at least a portion of the manufacturing process, said electronic data card including a microcomputer and containing data related to one or more of the manufacturing process and related equipment; and,

at least one light emitter associated with the electronic data card and operable in response to a set of instructions executed by said microcomputer to convey predetermined information about one or more of the manufacturing process and related equipment.

2. The apparatus as claimed in claim 1 wherein said data is related to a predetermined time to clean said container.

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3. The apparatus as claimed in claim 1 wherein said data is related to priority of the work in progress associated with said container.

4. The apparatus as claimed in claim 1 wherein the data card further includes a battery and said data is related to battery life.

5. The apparatus as claimed in claim 1 wherein said light emitter is a light emitting diode.

6. The apparatus as claimed in claim 1 wherein said work in progress comprises microchip wafers.

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7. An electronic data card for storing predetermined manufacturing process and related equipment information, said electronic data card including a microcomputer, an alphanumeric display and operator interface buttons for operator retrieval of stored manufacturing process and related equipment information, the improvement comprising:

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cont.

at least one light emitting diode conditionally illuminated in accordance with a set of instructions executed by the microcomputer to perform at least one conditional check upon at least one of said stored manufacturing process and related equipment information.

8. The electronic data card as claimed in claim 7 wherein said manufacturing process and related equipment information comprises a preventive maintenance variable.

9. The electronic data card as claimed in claim 7 wherein said manufacturing process and related equipment information comprises a process priority variable.

10. The electronic data card as claimed in claim 7 further comprising a battery, wherein said manufacturing process and related equipment information comprises a battery life variable.

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11. A method of visually conveying critical information associated with a production lot of work in progress wafers in a microchip fabrication process comprising the steps:

providing an electronic data card capable of storing information, executing a set of instructions, and having at least one controllably illuminated LED;

associating said electronic data card with said production lot throughout at least a portion of the fabrication process;

storing predetermined information corresponding to the production lot on said data card;

providing the electronic data card with a set of executable instructions for performing conditional checks on said predetermined information; and,

controlling the illumination of said at least one LED in a predetermined manner in accordance with results of said conditional checks on said predetermined information, whereby the manner in which the LED is illuminated conveys critical information associated with said production lot related to said predetermined information.

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12. The method as claimed in claim 11 wherein multiple LED are controllably illuminated to convey critical information related to a single piece of information.

13. The method as claimed in claim 11 wherein multiple LED are controllably illuminated to convey critical information related to multiple pieces of information.

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